REMARKS

Applicant requests that the above amendments be entered under 37 CFR 1.116. The amendments are formal in nature, since they have the effect of adding the features of claims 2 and 3 to claim 1, with only the minimum adjustments in wording necessary to accomplish these changes. Thus, whereas the previous claim 1 referred to

> supplying reducing gas to the catalyzer while the catalyzer is still sufficiently hot for regeneration to occur,

claim 1 as now amended recites

> supplying reducing gas to the catalyzer [until] ... the measured temperature [of the catalyzer] falls below ... [a] datum value [such that the catalyzer is no longer sufficiently hot for regeneration to occur].

Thus, claim 1 now recites the datum value of claim 3 as the criterion for determining whether the catalyzer is sufficiently hot for regeneration to occur. In the circumstances, applicant requests that the amendments be entered under 37 CFR 1.116(b)(2).

Claim 1 stands rejected under 35 USC 102 over JP 62 106826 A (identified by the examiner as Saito et al). Claims 2 and 3 stand rejected under 35 USC 103 over Saito et al in view of Debbage et al. Claim 1 has been amended to include the features of claims 2 and 3. Accordingly, applicant will address the question of whether claim 1, as amended, is patentable over Saito et al and Debbage et al.

Claim 1 is concerned with a method of operating an internal combustion engine having an oxidation catalyzer. In accordance with the invention, as defined in claim 1, the method comprises operating the engine and directing exhaust gases of the engine through the oxidation catalyzer and thereby heating the catalyzer. The method further comprises subsequently stopping the engine and regenerating the catalyzer by supplying reducing gas to the catalyzer, measuring the temperature of the catalyzer, comparing the measured temperature of the catalyzer with a datum value such that the catalyzer is sufficiently hot for regeneration to occur, and terminating supply of reducing gas to the catalyzer when the measured temperature falls below the datum value.

Claim 1 explicitly recites the step of stopping the engine, and therefore cannot be anticipated by a document that does not disclose the step of stopping an engine.

Saito et al discloses two catalysts 1-a and 1-b connected in parallel between the exhaust manifold of the engine 8 and the exhaust outlet. As described in the abstract, the exhaust gas from the engine is supplied to one of the catalysts (for example catalyst 1-a), and NOx is oxidized and absorbed by the catalyst in the presence of oxygen while a gaseous reducing agent is supplied to the other catalyst 1-b and this catalyst is regenerated. When the absorbing efficiency of the catalyst 1-a has fallen, the catalysts are changed over and the catalyst 1-b receives the exhaust gas from the engine while the catalyst 1-a is regenerated.

The examiner appears to take the position that when the exhaust gas supply is changed over, for example from the catalyst 1-a to the catalyst 1-b, the engine is stopped because the exhaust gas flow to the catalyst 1-a stops. Applicant submits that the examiner's interpretation of "stopping the engine" is unreasonably broad. The operation of "stopping" an engine is unambiguous. It means that the engine is no longer running. A person of ordinary skill in the art would be well able to distinguish between when an engine is stopped and when it is running, and the engine of Saito et al does not stop running just because it supplies exhaust gas to the catalyst 1-b rather than the catalyst 1-a. Since the purpose of providing the two catalysts 1-a and 1-b is to avoid stopping the engine, applicant submits that the examiner's interpretation of Saito et al is incorrect.

The examiner asserts that Debbage et al teaches at column 6, lines 1-13 that the supply of reducing gas may be terminated based on the measured temperature. Applicant believes that the examiner's interpretation of Debbage et al is not justified. Debbage et al mentions that two different reducing gases may be used, depending on the temperature zone of the exhaust gas channel in which the catalyzer resides. Debbage et al does not disclose or suggest that the supply of reducing gas is controlled or terminated on the basis of the measured temperature of the catalyzer.

In Debbage et al individual sections of the catalyzer are separated from the exhaust gas flow by louvered doors and regenerated while the exhaust gas flows through the other sections of the catalyzer. Thus, the regeneration is performed during the engine operation and the regeneration always occurs in practice at the

temperature of the exhaust gas, because the sections being regenerated are surrounded by exhaust gas. The location of the catalyzer is such that the temperature of the exhaust gas is high enough for the regeneration and there is no need to control the supply of reducing gas on the basis of the catalyzer temperature.

In view of the foregoing, applicant submits that the present invention, as claimed in claim 1, is not disclosed or suggested by Saito et al and Debbage et al, whether taken singly or in combination. Therefore, claim 1 is patentable and it follows that the dependent claims 4 and 5 also are patentable.

Respectfully submitted,

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